Amendment of the Claims

In the claims:

Please amend the claims as follows (additions are underlined and deletions are struck through):

49. (Currently Amended) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium comprising:

growing an edible plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in its edible portions, whereby the plant is a member of the family Brassicaceae; and

harvesting the plant after it has accumulated selenium in its edible portions to a concentration higher than that of the selenium in the environment, wherein the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration that is several fold higher than that of the selenium in the environment.

- 50. (Cancelled).
- 51. (Currently Amended) A method of producing an edible plant whose edible portions comprise significant concentrations of selenium comprising:

growing an edible plant in an environment that contains selenium under conditions that allow the plant to accumulate selenium in its edible portions; and

harvesting the plant after it has accumulated selenium in its edible portions to a concentration higher than that of the selenium in the environment, wherein the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 400 ppm.

52. (Currently Amended) The A method of any one of claims 49-51 49 or 51, wherein: the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration that is about 7.5 7500 fold higher than that of the selenium in the environment.

- 53. (Currently Amended) The method of any one of claims 49-51 49 or 51, wherein: the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about several thousand mg/kg dry weight.
- 54. (Currently Amended) The method of any one of claims 49-51 49 or 51, wherein: the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 2500 8000 mg/kg dry weight.
- 55. (Currently Amended) The method of any one of claims 49-51 49 or 51, wherein: the step of growing comprises growing the edible plant under conditions such that at least about 20% of the accumulated selenium is in the form of Se-methylselenocysteine.
- 56. (Currently Amended) The method of any one of claims 49-51 49 or 51, wherein: the step of growing comprises growing the edible plant under conditions such that at least about 85% of the accumulated selenium is water soluble.
- 57. (Currently Amended) The method of any one of claims 50- claim 51, wherein: the plant is a member of the family Brassicaceae.
- 58. (Previously Presented) The method of any one of claims 49-51 49 or 51, wherein: the plant is of a species selected from the group consisting of *Brassica juncea*, *Brassica oleracea*, and *Brassica carinata*.
- 59. (New) The method of claims 49 or 51, wherein:
 the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 2000 mg/kg dry weight.
- 60. (New) The method of claims 49 or 51, wherein:
 the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 1500 mg/kg dry weight.

61. (New) The method of claims 49 or 51, wherein:

the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 1000 mg/kg dry weight.

62. (New) The method of claims 49 or 51, wherein:

the step of harvesting comprises harvesting the plant after it has accumulated selenium in its edible portions to a concentration of at least about 500 mg/kg dry weight.